

Rudolf Virchow: Physician, Pathologist, Politician and the Diagnosis of Cancer

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Imperial Hotel, Llandudno
8th April 2016

For many the name Rudolf Virchow will evoke a vague memory of some obscure long dead German pathologist. In fact he was an amazing polymath who made major contributions to medicine. This presentation will interweave his story with the way in which cancer came to be defined. First it was a lump that spread and was eventually fatal. From Hippocrates and Galen up to the early 19th century its cause was held to be a disturbance in bodily humours. Virchow's major contribution was to recognise that cells, which up to his time were generally thought to arise *sui generis* from fluids, were always derived from other cells, and that cancer cells were derived from normal cells. He championed microscopy as a diagnostic tool and made many original discoveries. He recognised the need to identify epithelial cells remote from the surface in the diagnosis of carcinomas, and during his life time invasion and metastasis were recognised as criteria for cancer diagnosis. He was born in 1821 and died in 1902, the year that Boveri recognised the existence of chromosomes. That discovery led on to genes and then DNA and DNA alterations characteristic of certain cancers, increasingly used for diagnosis. There is no doubt that Virchow was a towering intellectual figure, but even today there is argument about the definition of cancer.

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